with its notes; it was the soother of his cares, and the means of supporting his remaining child, his faithful Jemmy.

When the noise had passed away, he stooped down, and said, in a tone of agony, for he heard the crash, "Is it broke, Jemmy?"

"Broke! broke!" exclaimed the little fellow, sobbing bitterly. "Aye, dear father, it is broke into a thousand pieces!"

The poor blind man clasped his hands, and stood in unutterable anguish; the child cried and sobbed as if his heart would break; and a man twice addressed them, in a voice of condolence, ere they were aware of his approach. It was the farmer who had invited them to his house. He had seen the huntsmen sweeping by—had heard the rough and cruel exclamation—and, fearing that some accident had occurred, he hastened towards them, and saw the scattered fragments which the boy was taking from the bag and laying on the grass.

"Curse on the hard-hearted villain!" said he. "May the red vengeance hotly pursue him, and may he break"——

"Hush, hush!" said poor Jemmy, roused from the depth of his sorrow. "Curse him not; vengeance is not fitted for our weak and erring hands. May the Lord forgive him! and I forgive him, though he has laid this desolate heart completely bare by that one blow."

"Come, come," said the farmer, dashing away the tears of pity which filled his eyes, "you are heartily welcome to my fire-side still. Come, both of you. I will take no excuse. But rouse yourself, man, and, with the blessing of God, you shall have another fiddle as good as the one you lost.

"Never! never!" said the blind man; "never will I handle the like of that again! It was dear and more precious to me than the eyesight which I lost. When I felt it in my hand—when I heard its soothing tone, it illumined my soul with the light of former days; and then my wife, my child, my happiness that vanished when they were gone, came floating through my mind like a sweet dream! It was the gift of my wife. Ah! little did the thoughtless huntsman think that when he broke that precious gift, he broke the minstrel's heart!"

Alas! and so it did. The worthy farmer strove to cheer his guest—in vain; he never rose from his bed again; and a few days after, he was laid in his last home. His parting moments were brightened by the kindness and attention of the farmer, who promised to adopt the little Jemmy—he had no son of his own—which he faithfully fulfilled; and, in course of time, he gave him his daughter in marriage.

Such is the sad tale; and I never meet one of those wandering minstrels, who are, in general, such favourites among our peasantry—particulary if he should happen to be blind—that I do not think of poor Jemmy Connor and his broken fiddle. C. L.

COMPARISON OF THE ANIMAL AND VEGETABLE KINGDOMS.

On cursorily viewing the animal and vegetable kingdoms, the eye is so readily presented with the conspicuous differences, that the mind of the general observer rests satisfied, that the line between them is distinct and definite. In the sturdy oak, the living memorial of past ages, that has stood the rage of tempests, and only seems more vigorous from the lapse of time—or the flower that blooms, and dies in a day, he sees no shadow of resemblance with the animated beings which find shelter in its branches, or draw honey from the nectaries attached to its petals. But if he examine the vegetable kingdom in its simplest form—the lichen, the moss, or the fungus—or, as it evinces higher characters of organization in the sensitive plant, that withering shrinks from the touch of man—the fly-trap, that seizes on the insect necessary for its nourishment—the pitcher of the nepenthes, that when filled with water closes in dry weather to prevent the evaporation of the liquid, and in a moist atmosphere causes its cover to receive the liquids requisite for its use—the holly, that while within reach of injury from animals is armed with prickles, yet resigning its spears when beyond the grasp of the enemy—the numerous flowers that sleep at night, or close their petals at regular periods, all exhibiting powers that betray life more abundantly than the corralline or zoophyte, he will observe a link that connects man, with his powers and his proud pre-eminence, to the simplest of plants and animals, the difference consisting in degrees of developement and organization. Aristotle designated plants as animals turned inside out; others ascribe the distinction as evinced by plants being denied the power of locomotion; but by availing ourselves of the knowledge, and attending to the researches and discoveries of the moderns, we shall be better enabled to trace analogies and determine differences which are more or less evident. Elements that enter into the composition of animals, are, with few exceptions, required to act in the vegetable formation; their relative quantity and their mode of combining present the most remarkable difference. Oxygen, hydrogen, carbon, and nitrogen, are to be found in both; nitrogen more particularly belongs to animals, carbon to vegetables: the cotton, white and bursting from its pod, is the purest vegetable carbon. Phosphorus and ammonia are also found in plants: the stepalia, and other flowers, owe their fetid smell, by which flies are attracted, to the disengagement of ammoniacal gas. Lime and silex are also claimed as the constituent parts of some vegetables. Thus the hard and polished case of the stalks of the cane, and many of the grasses, is composed of silex, which may be obtained in the form of small glass globules after the plants are burned. These globules answer for powerful microscopes.

The immediate principles of vegetable matter are the threefold combinations of hydrogen, oxygen, and carbon. Vegetables abound in acids, which are freely exhibited in fruits, leaves, and the cellular tissue, but rarely in the seeds or roots. The richness and variety of vegetable products are founded on the above-mentioned basis—and starch, gum, resins, resinous liquids or balms, sugar, in the cane, grape, and mushroom, the fatty, essential and aromatic oils, camphire and tannin, result from different combinations of these simple substances. By the addition of nitrogen we have indigo, and other colouring matters, gluten, albumen, &c. The chief difference observable in the chemical combination of substances necessary to the life of plants and animals, is, that more simplicity and fewer elements enter into the organization of vegetables.

In comparing the relative size of the two kingdoms, excess of dimensions belong to the vegetable tribe. The mighty baobab, the spreading banyan, the stately cedar, far surpass the largest of the animal species; the whale, the great serpent, the elephant, and the ostrich, offer masses considerably less. The manifestation of life in vegetables, is exhibited by increase of volume and luxuriant growth of parts; and, with the exception of the moss tribe, they do not present the same minute forms as in the animal kingdom, for here we meet beings so minute as to almost baffle the power of the microscope to distinguish their structure. In the circumstance of having their exterior bounded by waving or curved lines, we find an agreement between plants and animals. And this is one of the distinctive characters between them and mineral substances, which in their crystalline state present straight lines. But vegetables differ from animals in the circumstance of their symmetry. Thus in almost all animals, a line drawn vertically separates the body into two symmetrical halves, at least with respect to the external parts. To this rule, however, there are a few exceptions, as in the plaice and fish of that tribe, who have two eyes on one side of the body. That symmetry belongs to plants as well as to animals, cannot be denied, but it is not so decided; their bodies do not, when parted longitudinally, evince regularity of organs; though the flowers, sub-leaves, and fruits, show greater disposition to symmetry in form. A horizontal line separates the most complex vegetable into two distinct parts; the stem, with its branches, leaves, fruit, and flowers, depending on the influence of the sun for its vital principle, rises into the atmosphere for light, heat, and vivifying air; while the root penetrates into the earth, and by its searching fibres hid from light, seeks from the moist soil the fluids which it

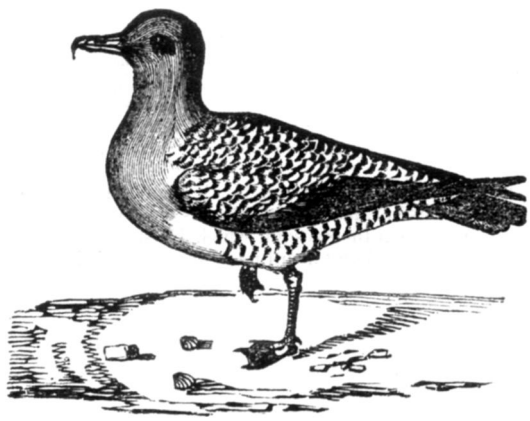
absorbs. Animals and vegetables are composed of solids and liquids; but the quantity of liquid is more considerable in animals, and they accordingly possess more softness or pliancy. The consistency of animals is affected by the medium in which they live; thus those which inhabit the water have not the firmness of the mammiferæ, birds, and insects; this may result from the difference of evaporation, which is abundant in the air, while a copious absorption of fluids takes place in water; however, neither air nor water could have influence sufficient to impress these respective characters, were they not at the beginning formed with bodies suited to the elements they were destined to inhabit. All plants have a cellular tissue, and a tubular or vascular one—spiral and nourishing vessels enclosed by an epidermis, or thin skin as a covering. The tubular and vascular tissues appear as the spiral and nourishing vessels, containing a jelly-like secretion; the tubular tissue forms the woody fibre, roots, trunk, branches and foot-stalk, and passes into the flowers as veins, and into the threads of the stamina, the pistil, and fruit. The vascular tissue forms the woody tubes which contain the sap, and convey it from the root; the sap ascending with the leaves experiences the influence of the sun, then returns to nourish the plant; these are the vital vessels, and extend into the root. These tissues combined and disposed in various ways, compose the bodies of the vascular plants; their ultimate object is to effect the growth and propagation of the vegetable. Elementary substances being absorbed, contribute to its growth by being assimilated to the plant; while the trachæ, or breathing tubes, the secreting vessels, all tend to the preservation of the individual composed of roots, trunk, stem, branches, leaves, tendons; the flowers, fruits, seeds, buds, and bulbs, are for the propagation of the species. The sap ascends from the soil nearly in a state of water, or as a colourless and insipid lymph, through woody or lymphatic tubes situated in the medullary sheath, attached to these tubes are the trachae, containing a liquid; these trachae abound in the leaves, which represent the lungs of the plant, and are not found in the roots, where the tubes for conveying the sap are numerous. As animals receive from the oxygen a vivifying principle indispensable to the maintenance of their life, so vegetables receive, through the medium of their leaves, a vivifying influence bestowed on them by the action of the sun; the action of this principle in animals may be termed *oxygenation*, in vegetables, *insolation*. These organic pores were first discovered by Grew, and are exceedingly numerous on the surface of leaves; they are on the inferior surface in trees and shrubs, on both in herbaceous plants, grasses, palms; their number varies considerably; in the iris germanica, 24,144 apertures lie on one square inch—ilex, 24,300—hyorange, 160,000—mezereum, 4,000. The leaves having received this vivifying influence, the fluid passes through the trachae to the interior of the stalk, extending from the leaves to the medullary sheath of the young branch which bears them; thus the trachae have functions analagous to the trachae of insects; one, conducting atmospheric air, which is a vivifying gas; the other, carrying a vivifying liquid. Thus, the rich and luxuriant foliage that clothes the tree with beauty, has an important part in the preservation of the life and growth of the parent stem; charged with this function, were the tree deprived of leaves it would cease to grow, the fruits would not increase in size, and soon wither and fall. Trees which from their nature would attain great magnitude, if despoiled of their leaves when young, never attain their due proportion, but assume the stunted appearance of shrubs.

GLEANINGS OF NATURAL HISTORY IN IRELAND.

No. II.

CURIOUS VARIETY OF THE SEA-GULL.

Our engraving represents an exceedingly curious (we had almost said unique) variety of the sea-gull recently shot in the Bay of Dublin, which we will venture to assert has not been described by Pennant, Walcot, Bewick, or Turton. We have also searched for it, but in vain, in Selby's British Ornithology, whichhas just been published, and is perhaps one of the most splendid works on Natural History that has ever appeared. The bird to which it seems to approach most nearly is the black-toed gull, the *Larus*, (or as Bewick, following Temminck, has it) the *Lestris Crepidatus;* but from this bird we think it is manifest that ours is clearly distinguishable in many important particulars. Turton and Bewick both uniteinplacing the black-toed gull in the class which the latter calls predatory gulls, and which both distinguish as having the upper mandible and nostrils *covered with a cere.* Turton describes the bird as "variegated *olive brown* and yellowish; beneath paler; shafts and *tips of the quills white.* The head and neck *marked longitudinally* with brown and whitish lines. The tail black with *yellowish bars,* and *tipt with white.*" Bewick does not appear to differ materially from Turton; he tells us "the *whole upper and under plumage is dark brown;* each feather slightly edged and tipped with ferruginous;" and from the following part of his description, which is a little indistinct, we gather that the primary and secondary quills, and the tail feathers also, are dusky, and *tipped with rusty spots.* In almost every one of the above particulars, we think a manifest difference will be perceivable between the black-toed gull and the bird we are about to describe.



This bird is about 12 inches in length, and 30 inches across its extended wings. Its head and neck are of a uniform light slaty mouse colour, the upper plumage of the body of the same hue, which however becomes gradually darker, till it is almost black toward the extremity of the wing and tail feathers. The back of the bird is marked, though not very regularly, with bars of a dull iron colour, which extend across the wings. The feathers of the breast and belly are of a dusky white, crossed in like manner as the back with bars, but here of a greyish hue, and are tipped with pale rust colour. The bill is of a dark bluish horn colour, and has no cere whatever; the upper mandible is hooked, and projects much over the lower one. The nostrils are placed in a kind of groove, which is partly formed by a ridge along the top of the bill, terminating in a patch or tip, like that of the albatross. When the beak is opened, the inside is discovered to be of a deep yellow. The iris of the eye was black. The feathers of the head and neck have a fine and silky appearance, and the uniformity of their colour is unvaried, except by a small crescent shaped black spot, extending in front of, and beneath the eye. The two primary quill feathers of the wing have their shafts perfectly white along their whole extent, while the shafts of the remaining feathers of the wing, as well as those of the tail, are of the deepest brown. The tertials, and also the upper and under tail covers, are snow white, and the bars of the latter are beautifully distinct, being almost black. The tail, which is wedge-shaped and concave, consists of fourteen feathers, of which the two centre ones are longer than the rest by about half an inch. The tail feathers are broad, not pointed, but on the contrary rounded at the tips. Notwithstanding the variety of shade on the outer surface of the plumage of this bird, on turning up its feathers it is found that every one without exception is snow white at its base. The leg is naked for about half an inch above